

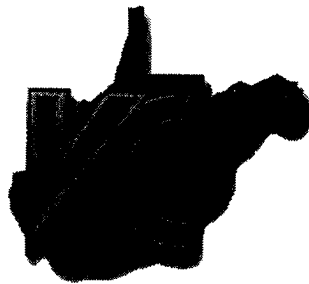
VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Annual Progress Report

VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Reporting Period

January 1998

REPORT DOCUMENTATION PAGE

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13. ABSTRACT (Maximum 200 words) The West Virginia High Technology Consortium Foundation is continuing development of the virtual company project under this grant from the Office of Naval Research. The NavLAMP Project is organized into six functional areas. These areas represent the following Navy interests: Advanced Manufacturing, Education, Product Line Engineering, Technology Transfer, Collateral Strategies, and Planning. During this report period the Foundation accomplished many objectives such as the placement of the VCLink web-site into operation in January 15, 1998, as well as the placement of a resume database and company profile database into the VCLink system. These databases are updated every 90 days. VCLink members are given user names and passwords to keep their information updating. The VC program awarded subcontracts to various small machine shops to review and utilize the tools provided on the VCLink to form VCs and bid for government contracts. The Team finalized a training needs survey for affiliate / manufacturing companies and provided training to meet their needs through interactive tutorials placed in our web-site and training workshops. Staff members attended conferences to exhibit and demo the VCLink to small business. We initiated a marketing plan with West Virginia University to obtain high level participation by area companies in joining the VCLink. We also held meetings with PEO (CU), PMA-282, and PM TCS. In November the team initiated a SPAWAR effort.				
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TASKS COMPLETED:

1. Two strategic planning sessions were conducted with the VC Program Management team and the VC contractors supporting the instantiation of the VCLink. These sessions focused on identifying and prioritizing VCLink capabilities
2. VC operations on the Internet were established at: <http://www.vclink.net>
3. A Program Management Review was conducted on January 9th, with David Rossi, Dr. Paul Rispin, Ted Lynch, Norm Christensen, Roger Duckworth, and Jim Estep to review Virtual Company Program status. Ken Lyndsey, Chief Technical Officer, RCBI was an invited guest. Projects discussed at this meeting included:
 - Development of the Virtual Company Best Practices System
 - Test and Evaluation of the Virtual Company Manufacturing Environments
 - Incorporation of Product Line Engineering Activities into the Virtual Company Model

Virtual Company Technology Transfer Activities:

- Update of the Networked Communications/Operations Infrastructure
- National Virtual Company Conference and Exhibition

Educational Initiatives:

- Computerized Tutorial Development
- Federal Acquisition and Assistance Certificate Program

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West Virginia High Technology Consortium Foundation

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February 1998

TASKS COMPLETED:

1. Met with Tygart, MPL and ProLogic, which have partnered to form a Virtual Company to expand the capabilities of the VCLink. Eddie Parker, attorney at law from the firm Jackson and Kelly provided legal assistance at this meeting.
2. Contacted Dr. Bud Forrester to be the speaker of the VCLink Symposium on March 12, 1998. He is the Vice President for Land Combat Systems, Electronic Sensors and Systems Division for Northrop Grumman Corporation. He retired from the Army as a Lieutenant General and holds a Ph. D. in Nuclear Physics.
3. Finalized education and training needs survey for affiliate/manufacturing companies. The purpose of this survey was to determine the community training needs. Training areas outlined in the survey were:
 - Business Software
 - Business Development
 - Virtual Company Program
 - Federal Acquisition and Assistance
 - Management
 - Miscellaneous

The VCLink education/training section will identify opportunities to meet these needs.

4. Briefed ProLogic on Unmanned aerial Vehicles in preparation of upcoming Product Line Engineering efforts with Program Executive Office for Cruise Missiles and unmanned Aerial Vehicles.
5. A Virtual Company Program Management Review was conducted on February 19th, with ted Lynch, Norm Christensen, Roger Duckworth, and Alxandra Amedro. Projects discused at this meeting included:
 - Financial review of Virtual Company Phase IV and V
 - Test and Evaluation of the Virtual Company Model in Manufacturing Environments
 - Incorporation of Product Line Engineering Activities into the Virtual Company model

Virtual Company Technology Transfer Activities:

- Virtual Company Link
- Symposium, March 12, 1998
- National Virtual Company Conference and Exhibition targeted for October, 1998

Educational Initiatives:

- Computerized Tutorial Development
- Federal Acquisition and Assistance Certificate Program
- Training Survey
- Mailed 400 invitations to WV manufacturing companies and WVHTC Foundation affiliate members for the inauguration of the Virtual Company Link on March 12, 1998.
- Received forty-one answers to our training interests' survey located in the VCLink homepage, from affiliate/manufacturing companies.

6. Met with Mr. David Rossi and Ted Lynch in Washington, DC. Projects discussed at this meeting included:

- Product Line Engineering additional funding
- Extension of VC – IV funding
- Realignment of VC – V funding

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West Virginia High Technology Consortium Foundation

Reporting Period

March – May 1998

TASKS COMPLETED:

1. Inaugurated the Virtual Company Link on March 12, 1998
2. Developed content and layout for the VCLink brochure, 300 copies were made,
3. Reviewed and modified the Virtual Company Life Cycle to be included in the VCLink.
4. Reviewed, modified and submitted Contract and Proposal templates for inclusion on the VCLink.
5. Met with Strike Warfare Software managers to discuss implementation of Product Line Engineering for Tactical Control Systems and ATWCS.
6. Met with Agility Forum executives and Maritech Agile Shipbuilding Toolkit (MAST program staff at Lehigh University in Bethlehem, Pennsylvania.
7. Met with executives at the Ben Franklin Technology Center to review their involvement in agile manufacturing within Pennsylvania.
8. Attended Product Line Issues Action Team Conference in Arlington, VA.
9. Contacted 20 manufacturing and information technology companies to be part of a Steering committee re design issues with the VCLink databases. The following companies attended this luncheon/Strategic Planning Session on April 29, 1998. D.N. American, Augusta Computer Services, EMT Associates, Electronic Warfare Associates, MPL, ProLogic, Tygart Technology, Intermetrics, Inc., CNC Industries, Nimble Associates, Aurora Flight Sciences of WV, Inc., and TMC Technologies.
10. The Foundation's facilities, property, personnel and award management manuals and procedures were sanitized and included in the VCLink homepage.
11. Met with the Regional Small Business Development Center to co-sponsor a "Business Development" workshop, one of the most wanted classes from the Training Interests Survey results. This workshop is scheduled for October 1, 1998.
12. Met with the Idaho National Engineering and Environmental Laboratory (INEEL) personnel and reached preliminary agreement on using the VCLink homepage as a Beta site for their CAD/CAM internet capability.

13. Program Management Review was conducted on April 9th, with Ted Lynch, Norm Christensen, John Gaddis, and Alexandra Amedro to review Virtual Company Program status. Projects discussed at this meeting included:

- Financials of VC – IV and VC V
- Test and Evaluation of the Virtual Company Model in Manufacturing
- Incorporation of Product line Engineering Activities into the Virtual Company Model

Virtual Company Technology Transfer Activities:

- New “look-feel” VCLink homepage
- Virtual Company Model Dissemination

Educational Initiatives:

- Computerized Tutorial Development (demo)
- Federal Acquisition and Assistance Certificate Program

VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Reporting Period

June 1998

TASKS COMPLETED:

1. **Held Program Management Review with David Rossi, Dr. Paul Rispin, Captain Mike Witte, Mark Dady, Steve Parker, Robert Fondren, Penny Pierce, Ted Lynch, Norm Christensen, John Gaddis and Roger Duckworth on June 5 at Patuxent River Naval Air Station.** Topics discussed at this meeting included: Virtual Company Best Practices System, Test and Evaluation of the Virtual Company Model in Manufacturing Environments, and Virtual Company Technology Transfer Activities.
2. **Scheduled Business Development Seminar for August 4, 1998.** The WVHTC Foundation Virtual Company Program and the Fairmont State College Regional Small Business Development Center are co-sponsoring a Business Development Seminar in response to a survey mailed to the community regarding its training needs. A tentative Agenda includes:
 - **Evaluate Your Business**
 - Determine your current business status
 - Is my business ready for growth?
 - Evaluate essential and non-essential elements
 - Determine your customer satisfaction
 - **Determining When Growth is Beneficial**
 - Evaluate your growth potential
 - Evaluate market potential and growth opportunities
 - When growth can mean failure
 - Determine the appropriate time for growth
 - **Planning for Growth**
 - Build effective financial plans and cash flow projections
 - Planning for costs associated with human resources
 - Learn why developing a relationship with your banker makes sense
 - **Marketing a Growing Business: Using the Media to Your Advantage**
 - Learn how to work with the media to promote your business
 - Avoid common pitfalls in advertising
 - Market your business at the lowest possible cost
 - Forge partnerships that can increase your business' marketing potential

3. **Held pre-proposal conference on June 3, 1998 at the National Guard Armory in Gassaway, WV.** Three manufacturing companies attended this conference: J&S Machine Co.; CAM & Associates; and NIMBL. The final RFP was released on June 12, 1998 and proposals are due on July 13, 1998.
4. **Scheduled VCLink Road Show for the month of July.** During the month of July, the VCLink team scheduled travel for VCLink workshops throughout WV. These workshops will start on July 6 and continue throughout the month of July.

6 Monongalia Co. TOC, University H.S	10 Jefferson Co. SBDC, Shepherd College	20 Randolph Co. SBDC, Elkins College
8 Marion Co. CLIN, "Woody" Williams Natn. Gd. Armory, Fairmont	14 Cabell Co. CLIN, Huntington	21 Harrison Co. Robert C. Byrd Air Center
9 Preston Co. TOC, Preston H.S.	16 Kanawha Co. CLIN, Charleston	22 Wood Co. SBDC, WVU Parkersburg
9 Taylor Co. Taylor Co. Vocational Center (afternoon session only)	17 Logan Co. SBDC, So. WV Community and Technical College with direct link broadcasts to Wyoming, Boone, & Mingo Co.	24 Ohio Co. SBDC, WV North.Com. Coll.

5. **Prepared the following documents for inclusion in the VCLink:**
 - **Guidance for Preparation of a Statement of Work.** This document is under review by the Foundation's Contract Manager before placing it in the VCLink homepage. This document is part of the many templates located in our website for VC members to download and use for the operation of a VC.
 - **Subcontract Policies and Procedures and the Small Purchase Procedures.** These manuals are located under the Operation section in the VCLink homepage. Member teams can download it or print it directly from the website.
 - **Best Practices from the TMP, LLC experiences in forming and operating a Virtual Company.** Interviews took place with the three companies that formed the LLC named TMP. Among some of the lessons learned are:
 - **Determine impact of businesses participating in LLCs** – the implications of participating in a LLC needs to be understood in terms of impact of 8a status, small business status, etc.

- **Define clear definition of roles and responsibilities** – the principle of selecting member companies for a virtual company based on core competencies is sound. One way to avoid conflict in the operation of a VC is to clearly define the roles and responsibilities of each team member. It is then critical for each participating company to fulfill its role and respect the roles of others.
- **Need to have a facilitator for the VC formation** – there is a need for a third party, a person outside the companies forming the VC . This person needs to have knowledge in virtual company concepts and experience leading team work to be able to guide and create communication channels among the VC members.
- **The LLC must operate as an entity separate from the member companies** – The personnel of the LLC must form the communication and operational bonds associated with a company in order to provide the best service to the customer. The formation of the LLC (or other method of virtual company formation) must be more than a legality; the processes and intent of the Virtual Company are more important to the ultimate success of the project. Teamwork and communication across company boundaries are critical.
- **The Team Selection Phase of the life-cycle is critical to the successful formation of a VC-** Members should look for companies with similar business and technical practices and philosophies, including similar policies and procedures. Similar approaches to projects and issues will facilitate the growth of trust and confidence among member companies.

CONTINUING ACTIVITIES:

- Population of the Virtual Company Link (VCLink Homepage)
- Collection of information for the “Best Practices” database
- Management activities of the following contracts:
 - Lockheed Martin and the Virtual Company Link Population
 - ProLogic and the Virtual Company Product Line Engineering (PLE) project
 - CNC Machine and Aurora Flight Sciences for the Manufacturing project
 - Tygart Technology, Prologic and MPL for the VCLink Development

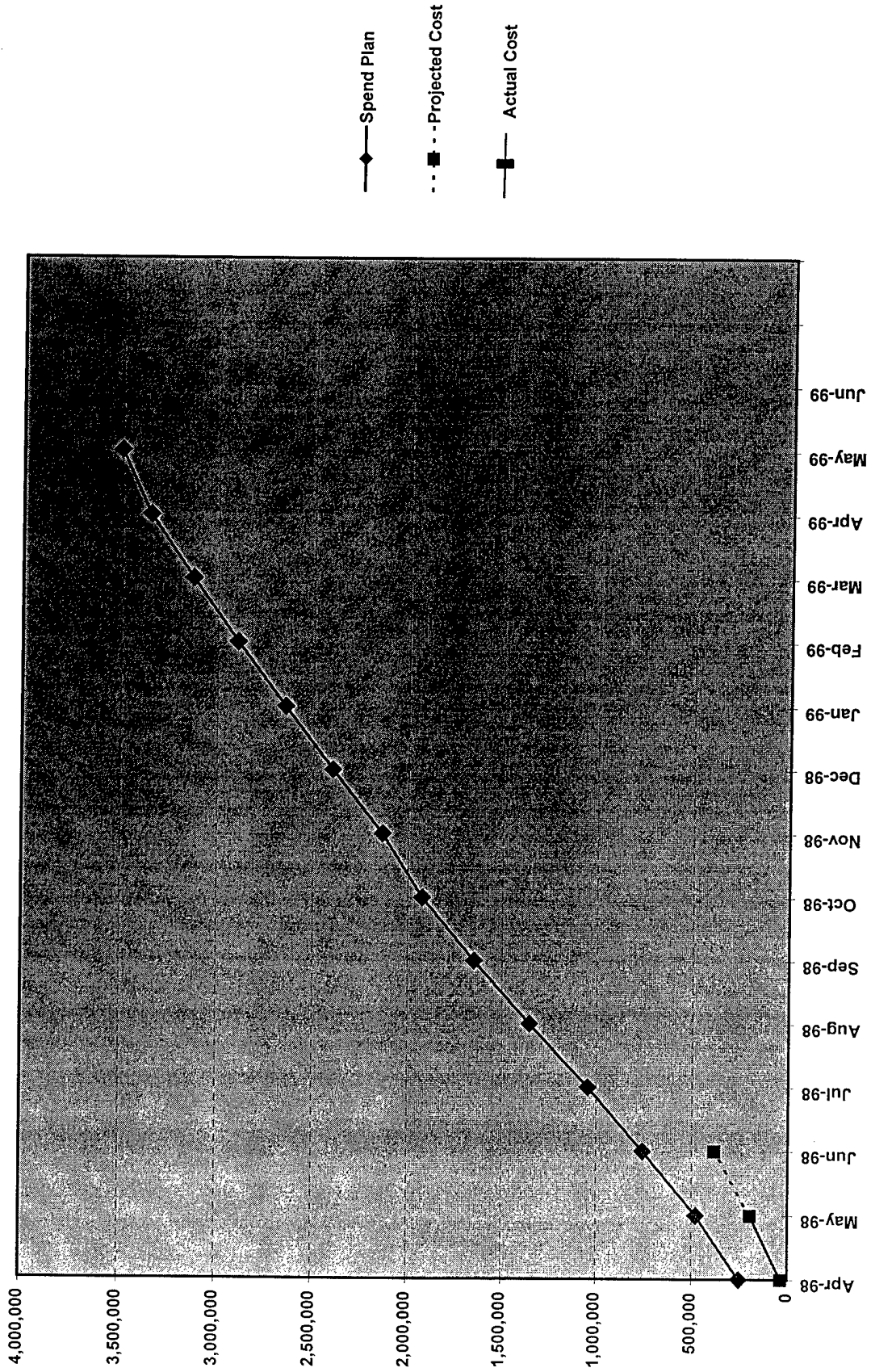
ACTIVITIES PLANNED FOR JULY:

- Continue planning for the National Virtual Company Conference and Exhibition in spring, 1999.
- Place resume database in operation on July 15, 1998.
- Meet with manufacturing/IT companies throughout the state to encourage participation in the company profile database.

FINANCIAL INFORMATION:

The information in the attached graph represents the overall financial status of the Phase V activities.

Virtual Company Phase V Spend Plan



VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Reporting Period

July 1998

TASKS COMPLETED:

1. **Held briefings on the VCLink for reporters George Hohman (Daily Mail) and Jim Ross (Huntington Herald Dispatch) and the WV Development Office (Charleston Sub-center).** Papers will run a feature article on the VCLink. These newspaper articles will be published as soon as we reschedule the VCLink presentations in Charleston and Huntington areas.
2. **Received two proposals regarding the VC Manufacturing Solicitation.** Two 25K awards will be given; one to Nimbl Associates and one to CAM Associates.
3. **Held Program Management Review with Ted Lynch, Norm Christensen, John Gaddis, Cahty Rotunda, and Alexandra Amedro on July 21, 1998.** Topics discussed at this meeting included: Virtual Company Best Practices System, Test and Evaluation of the Virtual Company Model in Manufacturing Environments, Virtual Company Technology Transfer Activities, and Educational initiatives.
4. **Held meeting with PTAC (Procurement Technical Assistance Center) and RCAC (Regional Contracting Assistance Center) to further establish a collaborative working relationship.** This relationship is going to help promote the economic well being of the region – centered on West Virginia. Two strategies have been developed to introduce businesses to the government and commercial arenas:
 - **Federal Government Process:** Softshare Federal Government opportunities will be screened at PTAC based upon a mutually developed filter designed to focus on opportunities targeted to Virtual Companies. The WVHTC Foundation will receive these opportunities and post them in the VCLink homepage. RCAC and PTAC will then broadcast those opportunities to the appropriate companies. Interested companies will use the VCLink resources for assistance in preparing a proposal. RCAC and PTAC will provide personal services to assist companies in the preparation of responses to RFPs and/or RFQs.
 - **Commercial Process:** Commercial opportunities will be located through multiple means. A template will be designed and included in the VCLink that commercial companies could use to enter their opportunities directly into the VCLink Opportunities Databases. RCAC and PTAC will then broadcast those opportunities to the appropriate companies. Interested companies will use the VCLink resources for assistance in preparing a proposal.
5. **Created a VCLink Configuration Change Control Board (CCCB) to discuss policies, technical and administrative topics before any major change and/or alteration is made to the VCLink Information Management System.** A problem/change request/report

system is going to be implemented to track any request. This system will be "world wide web" based. Requests are to be entered into this system by the requester. The request will be reviewed and given 1) priority status, 2) tracking number, and 3) request tracking data. Major changes will require an estimate of implementation time, cost, and impact to overall schedule. These will require the Program Manager's signature.

6. Met with George Caddy from Concurrent Technologies regarding the design of an "Enterprise Solutions Workshop" to be held in January, 1999. This workshop is co-sponsored by PTAC/RCAC/CTC and the WVHTCF. A survey will be developed to find out the business community interests in order to customize this workshop to their needs. Among some of the tracks that we could follow are: Managerial/Financial Accounting, Quality Development/Planning/Maintenance, Marketing & Sales, Human Resources, Production Scheduling/Work Flow Control & Inventory and Product Development.
7. Initiated marketing plan with West Virginia University (WVU) to obtain high level of participation by community companies in joining the VCLink. WVU developed a marketing questionnaire and it is being mailed directly to several hundred businesses.
8. Made preliminary arrangements to participate in a Small Business Trade Show in Charleston, WV. This Expo will provide an excellent opportunity to expose advantages of joining the VCLink to small businesses in WV.

CONTINUING ACTIVITIES:

- Continue working on the preparations for the Business Development Workshop scheduled for September 1, 1998. The workshop title is "**Breaking Through the Barriers to Growth**" presented by Aldonna R. Ambler, CMC, CSP. The presenter will demonstrate the classic barriers to growth and present alternative routes to get beyond the wall that keeps a company from reaching its full profit potential. Strategies such as "get a boost from a strong friend" or "go around the wall" can be translated into options such as forming strategic alliances or seeking new channels of distribution. *(Enclosed is a brochure announcing this workshop.)*
- Population of the Virtual Company Link (VCLink Homepage).
- Collection of information for the "Best Practices" database
- Management activities of the following contracts:

- Lockheed Martin and the Virtual Company Link Population
- ProLogic and the Virtual Company Product Line Engineering (PLE) project
- Tygart Technology, Prologic and MPL for the VCLink Development

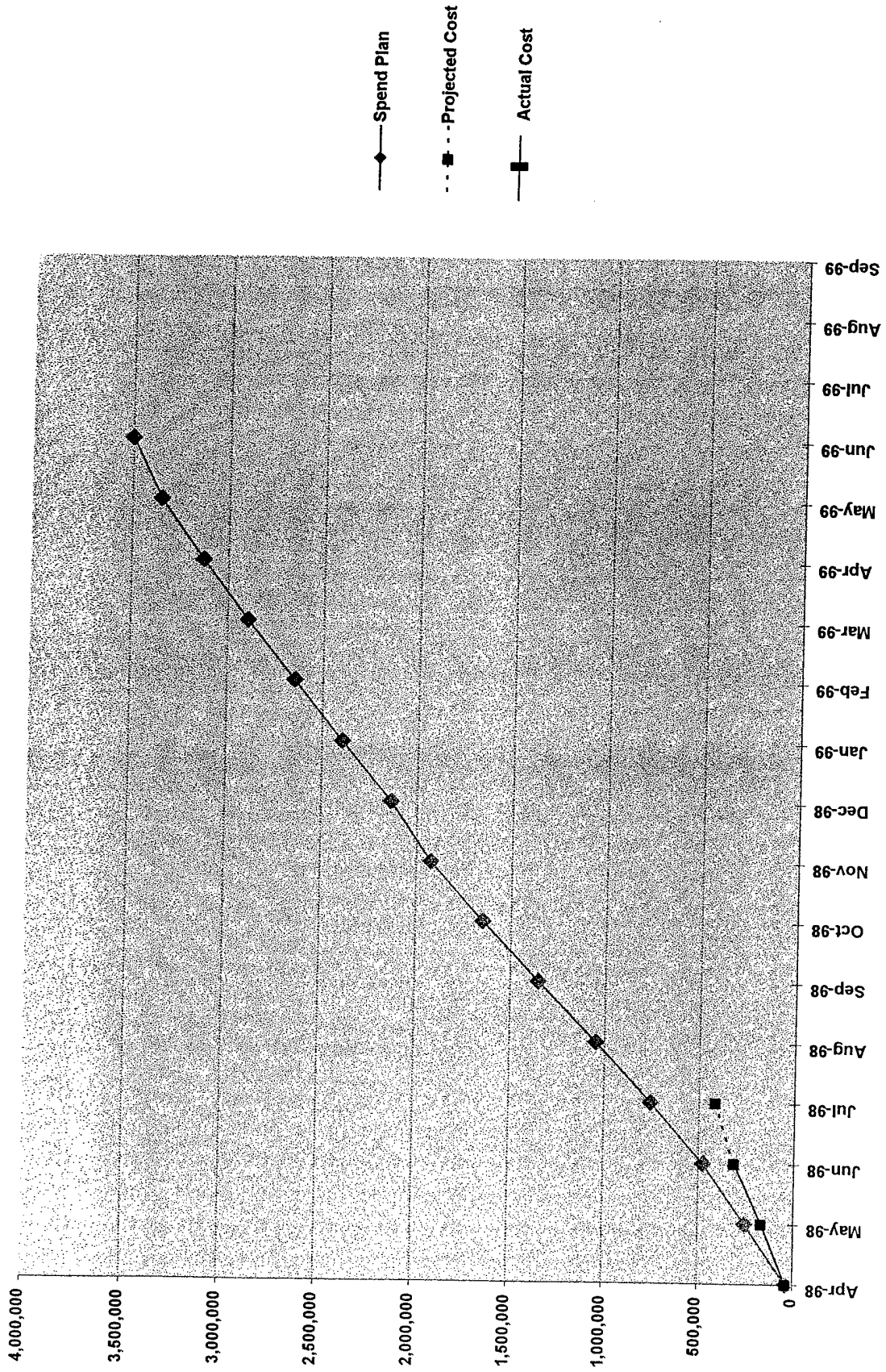
ACTIVITIES PLANNED FOR AUGUST:

- Continue planning for the National Virtual Company Conference and Exhibition in spring, 1999.
- Meet with manufacturing/IT companies throughout the state to encourage participation in the company profile database.

FINANCIAL INFORMATION:

The information in the attached graph represents the overall financial status of the Phase V activities.

Virtual Company Phase V Spend Plan



VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

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August 1998

TASKS COMPLETED:

1. Held a Product Line Engineering meeting at PaxRiver in support of TTWCS effort. PMA extended invitation to accompany them to SPAWAR in September for DII COE meeting to discuss software development.
2. Initiated domain analysis on TTWCS by the Product Line Engineering team.
3. Reviewed and revised Virtual Company Spend Plan for 1999.
4. Placed Resume Database in operation in August 8, 1998. Users can access the database through the internet and input their resume. Each person is in charge of updating and modifying his/her own resume. Users need to update their resume every 90 days, otherwise they will be deleted from the system.
5. Attended the West Virginia Manufacturing Extension Program "*Manufacturing in the Future*" conference in Charleston. Very low attendance. It is very difficult to get manufacturers to come to events. The Virtual Company program is taking the lead with related providers to coordinate activities to maximize attendance.
6. Held a PMR to review the VCLink homepage. The WVHTC Foundation VC program staff and the contractor team attended this review. Several action items came out of this meeting to improve the performance of the VCLink homepage. Among some of these items are:
 - Get our in-house lawyer to review the VCLink homepage regarding liability issues due to the amount of templates and information stored in the site.
 - Add an introductory paragraph to the Profile and Resume Database pages. This paragraph will explain how to use these databases and the importance of keeping the information updated.
 - Delete several graphics such as the VCLink and VC Model graphic that do not add anything to the website but instead confuses the reader.
7. Completed an analysis of the VCLink World-Wide Web Interface by Jerrold D. Prothero, Ph.D. This analysis summarizes some principles and specific knowledge, which may be useful in the development of Human Computer Interfaces from the

user's point of view. The typical VCLink WWW user is assumed to have very limited computer experience, and to represent a company of 20 people or less which lacks substantial inhouse computer expertise. Their primary interest in the VCLink is to:

- Learn to conduct business more profitably
 - Gain access to additional business opportunities
 - Receive materials from the VCLink program
 - Search for online information
 - Submit online information
 - Communicate with the VCLink program, or with other users
 - Join the VCLink program
8. Prepared and sent final patent report for VC4.
9. Held an in-house Program Management Review with the Virtual Company Staff to analyze current VC contracts regarding cost, schedule and performance issues.

CONTINUING ACTIVITIES:

- Continue working with George Caddy from Concurrent Technologies regarding the design of an "Enterprise Solutions Workshop" to be held in January, 1999. This workshop is co-sponsored by PTAC/RCAC/CTC and the WVHTCF Virtual Company Program. A phone survey was developed to find out the best time to hold this conference. Based on the survey results, Friday is the best time to host the conference. Among some of the tracks that we could follow are: Managerial, Financial Accounting, Quality Development, Planning, Maintenance, Marketing & Sales, Human Resources, Production Scheduling/Work Flow Control & Inventory and Product
- **"Breaking Through the Barriers to Growth"** presented by Aldonna R. Ambler, CMC, CSP, will be held on September 1, 1998. The presenter will demonstrate the classic barriers to growth and present alternative routes to get beyond the wall that keeps a company from reaching its full profit potential. Strategies such as "get a boost from a strong friend" or "go around the wall" can be translated into options such as forming strategic alliances or seeking new channels of distribution. This workshop will feature a luncheon presentation by Roger Duckworth on the VCLink. The goal of this presentation is to recruit more companies to populate the Company Profile and Resume Databases.
- Continue populating the Virtual Company Link (VCLink Homepage).

- Continue working on the arrangements to participate in a Small Business Trade Show in Charleston, WV. This Expo will provide an excellent opportunity to expose advantages of joining the VCLink to small businesses in WV. We will demonstrate the VCLink capabilities and encourage people to register their companies on our database.
- Continue planning the Virtual Company Conference to be held next Spring.
- Continue working on the Virtual Company Phase IV final report.
- Continue managing the following contracts:
 - Lockheed Martin and the Virtual Company Link Population
 - ProLogic and the Virtual Company Product Line Engineering (PLE) project
 - Tygart Technology, Prologic and MPL for the VCLink Development
 - Nimble and CAM & Associates and the Manufacturing contracts
- Continue working close-out requirements for completed Virtual Company grants

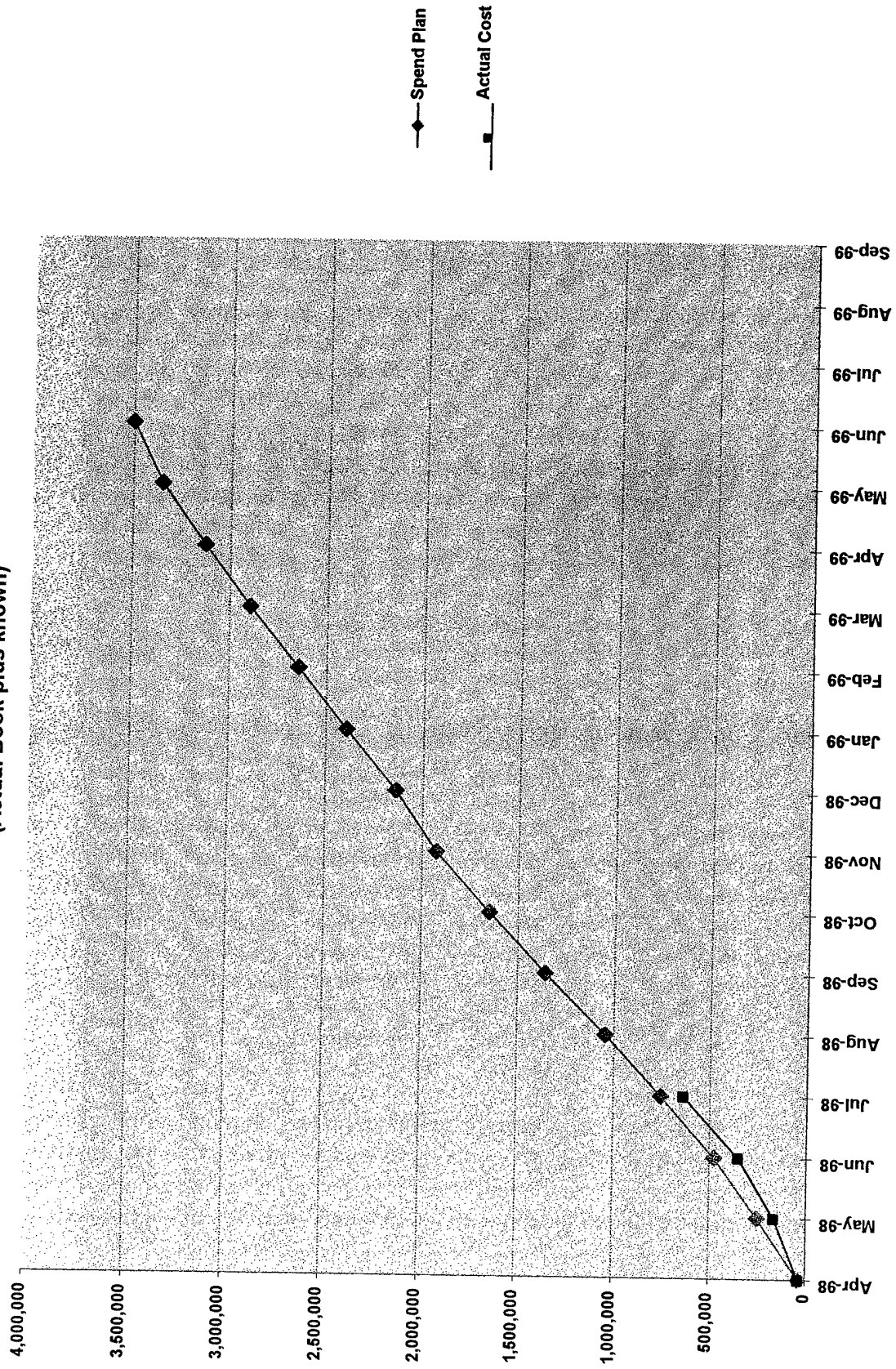
ACTIVITIES PLANNED FOR SEPTEMBER:

- Host the Business Development Workshop on September 1, 1998.
- Meet with manufacturing/IT companies throughout the state to encourage participation in the company profile database.
- Host a Program Management Review with Ted Lynch on September 10, 1998.
- Prepare for selection of four additional manufacturing companies to be VC manufacturers.
- Initiate planning on:
 - Exporting the VCLink to other states.
 - Expanding PLE efforts in the Navy
- PLE team will be visiting SPAWAR with TTWCS representatives to coordinate DII COE and Command and Control Activities.
- New Virtual Company Program Manager to be appointed.

FINANCIAL INFORMATION:

The information in the attached graph represents the overall financial status of the Phase V activities.

Virtual Company Phase V
Spend Plan
(Actual Book plus known)





VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Reporting Period

September 1998



TASKS COMPLETED:

1. Held a meeting with the TMP, LLC Program Manager to refocus work effort on the VCLink. A meeting was also held with the Presidents of each of the companies that form the TMP team to insure understanding of the effort required and to insure that a single Program Manager was appointed to run the program. These are the tasks that the TMP team will be working on for the rest of the project:
 - Document and Test (site cleanup)
 - Opportunity Search views
 - Opportunity (Affiliate email attachment)
 - Working (ensure content/completion):
 - Company Profile DB
 - Email Capability
 - *Oracle Installation*
 - Link to Opportunity
 - Resume DB
 - Bulletin Board
 - Opportunity drop
 - Chat Room/Discussion
 - Web Link
 - Feedback Mechanism
 - Program Management
 - Event Registration/scheduling
 - Secure Proposal development
 - Workflow support
2. Held a Program Managers Review at the WVHTC Foundation on September 10, 1998. Attendees to the PMR were Ted Lynch, Roger Duckworth and John Gaddis. Topics discussed at the PMR were:
 - VC Spending Status
 - VC Manufacturing Initiatives
 - Technology transfer Activities
 - Education Initiatives
 - VCLink Status
3. Submitted monthly report to Dr. Rispin and Ted Lynch for the month of August.
4. Searched on the *United States Patent and Trademark Office* trademark database for the words VCLink, and IBIS (Internet Business Information System) so we could trademark them. We found out that VCLink has already been trademarked as well as IBIS. We are looking for a different name that will describe our program.



5. Initiated domain analysis on TTWCS by the Product Line Engineering team (ask Roger).
6. Held a Business Development workshop on **"Breaking Through the Barriers to Growth"** presented by Aldonna R. Ambler, CMC, CSP, on September 1, 1998. Forty people attended the workshop. The presenter demonstrated the classic barriers to growth and presented alternative routes to get beyond the wall that keeps a company from reaching its full profit potential. Strategies such as "get a boost from a strong friend" or "go around the wall" were translated into options such as forming strategic alliances or seeking new channels of distribution. This workshop featured a luncheon presentation by Roger Duckworth on the VCLink. The goal of this presentation was to recruit more companies to populate the Company Profile and Resume Databases.
7. Attended the Appalachian Small Business Expo in Charleston, WV, on September 30 and October 1, 1998. This Expo provided an excellent opportunity to expose advantages of joining the VCLink to small businesses in WV. We demonstrated the VCLink capabilities and encouraged people to register their companies on our database.
8. Appointed Roger Duckworth as new Virtual Company Program Manager who will replace Norm Christensen. Mr Duckworth was Deputy program manager for the DoD short range unmanned aerial vehicle; Deputy director of the Program Executive Office (USN) for cruise missiles and unmanned aerial vehicles; Program manager for the Outrider unmanned aerial vehicle; and. Programmer and analyst for the Army's \$16 billion RDA program.
9. Advertised on the VCLink Bulletin Board for establishing the VCLink Strategic Advisory Council.
10. Briefed CAM & Associates, one of the manufacturing contractors that will be interacting with the VCLink on a daily basis, on the VCLink features and what it is expected from them to do for the program.
11. Wrote and mailed a modification proposal for the Virtual Company Distributed Manufacturing Demonstration, Navy Leadership in Advanced Manufacturing Process (NAVLAMP). The Foundation provided this proposal for the purpose of requesting supplemental funding in order to capitalize on accelerated successes of the NAVLAMP program to date.
For this modification, the Foundation proposed to pursue its VCLink objectives via the following enhancements:
 - VCLink Private Sector Opportunity Identification
 - VCLink Implementation Acceleration



- Product Line Engineering
These proposed tasks are refinements, additions, or enhancements to current NAVLAMP tasks and will conform to the current NAVLAMP schedule.
- 12. PLE team visited SPAWAR with TTWCS representatives to coordinate DII COE and Command and Control Activities
- 13. Obtained several generic Business Plan templates to be added to the VCLink homepage. These templates along with "How to write a Business Plan" template were submitted to the WVHTC Foundation by Lockheed as one of the deliverables from their contract for the support of the VCLink.

CONTINUING ACTIVITIES:

- Continue working with George Caddy from Concurrent Technologies regarding the design of an "Enterprise Solutions Workshop" to be held in January, 1999. This workshop is co-sponsored by PTAC/RCAC/CTC and the WVHTCF Virtual Company Program. A phone survey was developed to find out the best time to hold this conference. Based on the survey results, Friday is the best time to host the conference. Among some of the tracks that we could follow are: Managerial, Financial Accounting, Quality Development, Planning, Maintenance, Marketing & Sales, Human Resources, Production Scheduling/Work Flow Control & Inventory and Product
- Continue populating the Virtual Company Link (VCLink Homepage).
- Continue planning the Virtual Company Conference to be held next Spring.
- Continue working on the proposal on Exporting the VCLink to other states and Expanding PLE efforts in the Navy
- Continue managing the following contracts:
 - Lockheed Martin and the Virtual Company Link Population
 - ProLogic and the Virtual Company Product Line Engineering (PLE) project
 - Tygart Technology, Prologic and MPL for the VCLink Development
 - Nimble and CAM & Associates and the Manufacturing contracts
- Continue posting business opportunities on a daily basis from the Commerce Business Daily.



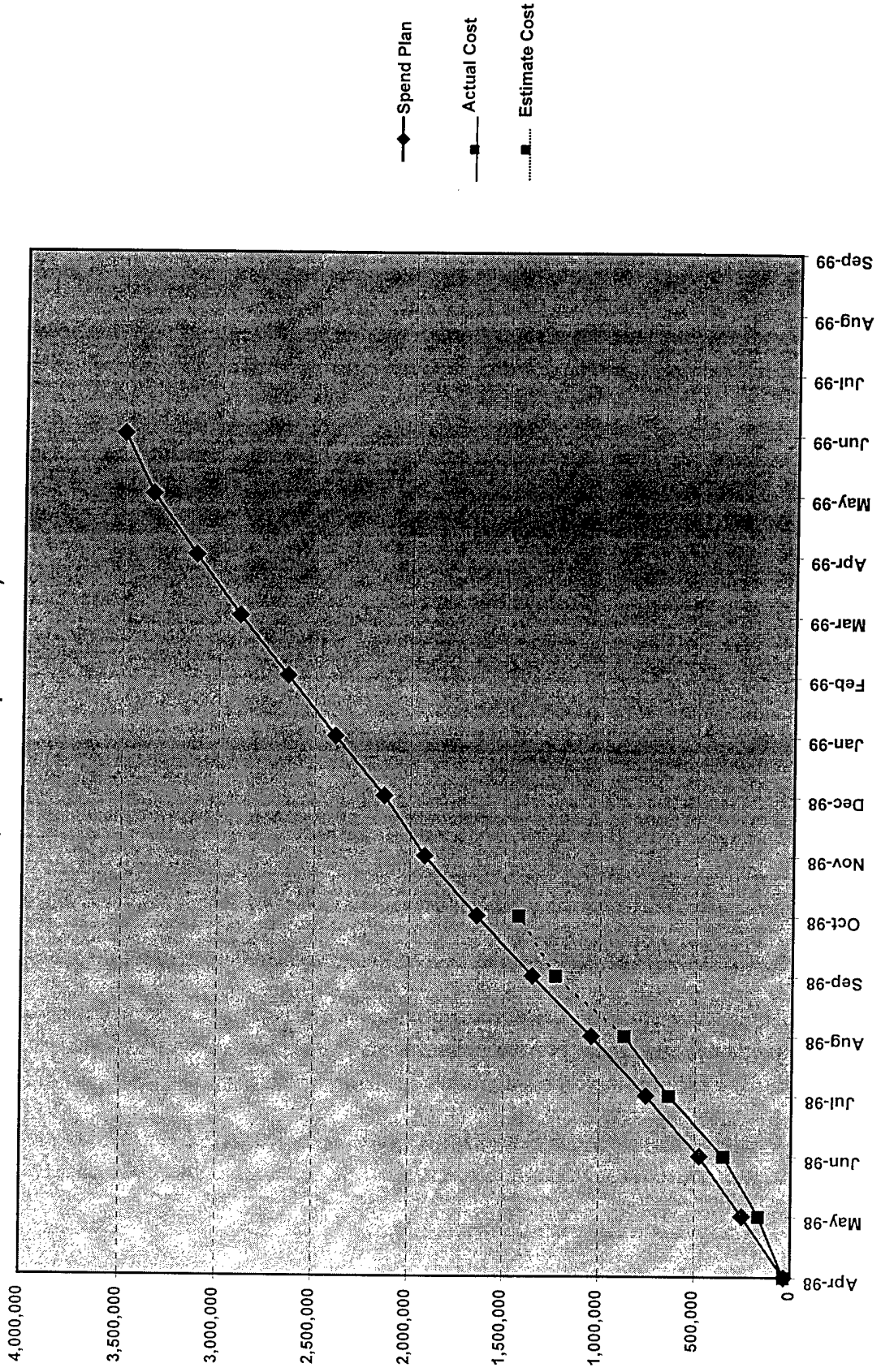
ACTIVITIES PLANNED FOR OCTOBER:

- Meet with manufacturing/IT companies throughout the state to encourage participation in the company profile database as well as resume database.
- Host a Program Management Review with, David Rossi, Dr Paul Rispin, and Ted Lynch on October 27, 1998 at the ONR facilities.
- Prepare for selection of four additional manufacturing companies to be VC manufacturers.

FINANCIAL INFORMATION:

The information in the attached graph represents the overall financial status of the Phase V activities.

Virtual Company Phase V
Spend Plan
(Actual Book plus known)





VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Reporting Period

October 1998



TASKS COMPLETED:

1. Attended Tech Fest in Jackson county, Ripley, WV to see the latest in computer and Internet technologies plus free training classes and demonstrations. Roger was the keynote speaker at this event and did a demo on the VCLink. There was a lot of interest in our system and several companies signed up to be part of the profile database.
2. Attended the American Helicopter Society Convention in DC and found out that there is a lot of interest in the PLE program for future helicopter development.
3. Held a Program Managers Review at the ONR facility on October 27, 1998. Attendees to the PMR were David Rossi, Dr. Paul Rispin, Ted Lynch, Roger Duckworth and John Gaddis. Topics discussed at the PMR were:
 - Accomplishments
 - Personnel
 - Financial status
 - Schedule
 - Project 1: Virtual Company Manufacturing
 - Project 2: Product Line Engineering
 - Project 3: VCLink
 - Plans
 - Discussion
4. Submitted monthly report to Dr. Rispin and Ted Lynch for the month of September.
5. Received a Technical Management Plan from Lockheed focusing in the virtual Company Link (VCLink) population task. The following table represents the population focus area by month up to December, 1998 as well as the Help text development area:

Month	Population focus area	Help text development area
September	Business Plans	
October	MOA/MOU, Teaming Agreements	
November	Proposal Development	Profile DB and Resume DB
December	Business Processes and Procedures	Entering the site, Opportunities

6. Received the following guides and templates from Lockheed Martin to include in the VCLink website:



- Sample Intellectual Property Teaming Agreement
 - Simple contract
 - Proprietary-agreement
 - Partner agreement
 - Non-disclosure (employee) agreement
 - Non-disclosure (client) agreement
 - Contract Modification
 - Contract Extension
 - Confidentiality Agreement Template
7. Attended Marion County Business Expo and performed VCLink demo. Several companies signed up to be part of the VCLink Profile database. 60 companies attended the event. There was a lot of interest in our system.
 8. Hired Matt McHugh as a software engineer to work in the PLE initiatives. Matt is in charge of providing analysis and support for the Virtual Company Product Line project. Matt has a B.S. in Management Information Systems from the Wright State University.
 9. Visited the Rochester Institute of Technology to brief the VcLink and PLE initiatives.
 10. Completed final technical and cost report for the Virtual Company Phase IV.
 11. Completed Manufacturing solicitation to seek out a minimum of ten companies to assemble their own Virtual Companies in response to an opportunity using the VCLink system. Solicitation will be released in November.
 12. Contacted all VCLink members and asked them to update their company profile information.
 13. Received \$102K from ONR and added to our VC5 spent plan.
 14. Briefed Dr. Hazel Palmer, state director of the WV Small Business Development Center, about the VCLink capabilities for small businesses.

CONTINUING ACTIVITIES:

- Continue working with George Caddy from Concurrent Technologies regarding the design of an "Enterprise Solutions Workshop" to be held in January, 1999. This workshop is co-sponsored by PTAC/RCAC/CTC and the WVHTCF Virtual Company Program.



- Continue populating the Virtual Company Link (VCLink Homepage).
- Continue planning the Spring International VC Conference.
- Continue managing the following contracts:
 - Lockheed Martin and the Virtual Company Link Population
 - ProLogic and the Virtual Company Product Line Engineering (PLE) project
 - Tygart Technology, Prologic and MPL for the VCLink Development
 - Nimble and CAM & Associates and the Manufacturing contracts
- Continue posting business opportunities on a daily basis from the Commerce Business Daily.

ACTIVITIES PLANNED FOR NOVEMBER:

- Meet with manufacturing/IT companies throughout the state to encourage participation in the company profile database as well as resume database.
- Brief all WV Small Business Directors on the VCLink in Charleston, WV on November 4, 1998.
- Release VC manufacturing solicitation.
- Initiate Statement of Work planning for VCLink enhancements to provide a better service to the business community and the Navy.
- Finalize NavLead proposal.

FINANCIAL INFORMATION:

The information in the attached graph represents the overall financial status of the Phase V activities.



VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Reporting Period

November 1998



TASKS COMPLETED:

1. Briefed all WV Small Business Directors on the VCLink in Charleston, WV on November 4, 1998. Dr. Hazel Palmer, Director of the WV SBDC invited the VC program to brief all WV SBDC directors at her quarterly management conference. We won their enthusiastic endorsement of the VCLink.
2. Held PMR with VCLink subcontractors (MPL, Tygart and Prologic) to discuss status as related to site development.
3. Submitted monthly report to Dr. Rispin and Ted Lynch for the month of October.
4. Initiated Resume Database Marketing Plan by contacting all WV colleges and universities to let them know about the VCLink Resume Database. Information packages have been mailed to these institutions to be posted in their career services departments.
5. Completed manufacturing solicitation. It will be released in December 15, 1998.
6. Contacted all VCLink members and reminded them to update their company profile information. Provided username and passwords again to members since many of them lost them.
7. Attended West Virginia University Career Day and distributed VCLink resume flyers to let students know about the powerful Database we have to post their resumes for free.
8. Created VCLink signs to be displayed at the December Symposium in Morgantown.
9. A call for presenters for the International Virtual Company Conference was posted in the VCLink website. (See attached "Call for Presenters" ad.)
10. Created Access contacts database for VCLink marketing initiatives.

CONTINUING ACTIVITIES:

- Continue populating the Virtual Company Link (VCLink Homepage).
- Continue researching CASE tools as part of the Virtual Company Product Line effort.



- Continue planning the Spring International VC Conference to be held in May 26 and 27 in Charleston, WV.
- Continue managing the following contracts:
 - Lockheed Martin and the Virtual Company Link Population
 - ProLogic and the Virtual Company Product Line Engineering (PLE) project
 - Tygart Technology, Prologic and MPL for the VCLink Development
 - Nimble and CAM & Associates and the Manufacturing contracts
- Continue posting business opportunities on a daily basis from the Commerce Business Daily.
- Continue working on the analysis to select the best set of software for the VCLink. The choices are: All Lotus Notes, ASP/Oracle, or a mix of Notes and ASP/Oracle.

ACTIVITIES PLANNED FOR DECEMBER:

- Post more legal and contract templates in the VCLink.
- Prepare SOW for Block 1 for the continuation of work on the development of the VCLink functionality and implementation of new design
- Produce full page article on the VCLink for the next Small Business Development Center Magazine issue.
- Meet with manufacturing/IT companies throughout the state to encourage participation in the company profile database as well as resume database.
- Finalize Statement of Work for VCLink enhancements to provide a better service to the business community and the Navy.
- Attend the Industries of the Future symposium at the National Research Center for Coal and Energy at West Virginia University.
- Finalize booth design for VCLink demonstrations.
- Develop a plan to train WV Small Business Development Directors on the use of the Internet and VCLink. Phone calls will be made to each director to establish dates for their training as well as training of their member companies.



- Initiate preparations to attend the Software Technology Conference in May in Utah. The VC program will have a booth displaying information on the VCLink and Product Line initiatives.
- Prepare a full page article on the VCLink to be published in the WVHTC Foundation Quarterly issue of the Innovator magazine.
- Finalize Marketing Strategy for the VCLink. This task is being coordinated with West Virginia University.
- Initiate contact with the Chambers of Commerce to involve them in the VCLink program.
- Meet with PEO(CU) and Dahlgren PLE representatives on December 15, 1998 to coordinate SBIR and Virtual Company Product Line efforts.
- Modify Lockheed's contract to delete the development of help text for the VCLink homepage task and add support for the IVCC.

FINANCIAL INFORMATION:

The information in the attached graph represents the overall financial status of the Phase V activities.



VIRTUAL COMPANY PROGRAM



West Virginia High Technology Consortium Foundation

Reporting Period

December 1998



TASKS COMPLETED:

1. Attended the Industries of the Future symposium at the National Research Center for Coal and Energy at West Virginia University and hosted a booth to demonstrate the VCLink.
2. Submitted monthly report to Dr. Rispin and Ted Lynch for the month of November.
3. Received six abstract submittals for presentations at the IVCC, May 1999.
4. Released Manufacturing solicitation in December 15, 1998.
5. Submitted VCLink articles to be published in the WVHTC Foundation Innovator magazine.
6. Reconfigured Resumes and Opportunities views in the VCLink homepage.
7. Held Program Management Review with Ted Lynch, Roger Duckworth, John Gaddis, Anna Rittenhouse and Alexandra Amedro on December 17 at the WVHTC Foundation. Topics discussed at this meeting included: Accomplishments, Personnel, financial overview, schedule, virtual company manufacturing, product line engineering, the VCLink homepage and future plans.
8. Completed Lockheed Martin's contract modification to delete the development of help text for the VCLink homepage and to assign them a task to support the International Virtual Company Conference.
9. Met with PEO(CU) and Dahlgren PLE representatives on December 15, 1998 to coordinate Virtual Company Product Line efforts.
10. Completed new graphical user interface to better manage new members of the VCLink. Among some of the new tools are mail tool (sent/receive mail), judge application tool (to assign username/password) and various tracking mechanisms.

CONTINUING ACTIVITIES:

- Continue populating the Virtual Company Link (VCLink Homepage).



- Continue planning the Spring International VC Conference to be held in May 26 and 27 in Charleston, WV.
- Continue managing the following contracts:
 - Lockheed Martin and the Virtual Company Link Population
 - ProLogic and the Virtual Company Product Line Engineering (PLE) project
 - Tygart Technology, Prologic and MPL for the VCLink Development
 - Nimble and CAM & Associates and the Manufacturing contracts
- Continue posting business opportunities on a daily basis from the Commerce Business Daily.
- Continue preparations to attend the Software Technology Conference in May in Utah. The VC program will have a booth displaying information on the VCLink and Product Line initiatives.

ACTIVITIES PLANNED FOR JANUARY:

- Finalize SOW for Block 1 for the continuation of work on the development of the VCLink functionality and implementation of new design to provide a better service to the business community and to the navy.
- Review manufacturing proposals. They are due on January 15, 1999.
- Review IVCC abstracts which are due on January 15, 1999.
- Finalize booth design for VCLink demonstrations.
- Establish dates for SBDC director training as well as training of their member companies on the internet and the VCLink.
- Finalize analysis to select the best set of software for the VCLink. The choices are: All Lotus Notes, ASP/Oracle, or a mix of Notes and ASP/Oracle.
- Finalize Marketing Strategy for the VCLink. This task is being coordinated with West Virginia University.
- Contact Chambers of Commerce to involve them in the VCLink program.



- Finalize CASE tools work for PMA-282 as a prelude to CLAWS effort
- Initiate CLAWS effort for PMA-282 in late January.

FINANCIAL INFORMATION:

The information in the attached graph represents the overall financial status of the Phase V activities.

Virtual Company Phase V
Spend Plan
(Actual Book plus known)

